ABSTRACT

Reduction of aliasing artifacts along discontinuity edges of a rendered polygon mesh is achieved by overdrawing the edges as antialiased lines. The discontinuity edges are oriented consistently and blended as they approach silhouettes in the mesh to avoid popping at the edge, thereby achieving a temporal smoothness at the silhouettes. This temporal smoothness is balanced with a competing desire to maintain spatial sharpness by utilizing an asymmetric blending technique. To further improve results, the discontinuity edges can be sorted by depth prior to overdrawing them. These processes are effective at reducing the temporal artifact known as "crawling jaggies".